

Notice of Allowability

Application No.

10/776,445

Examiner

Uyen T. Le

Applicant(s)

HASLAM ET AL.

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 27 September 2007 and interview of 4 December 2007.
2. ☒ The allowed claim(s) is/are 1-4 and 6-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Drawings

The replacement sheet for Figure 1 filed 27 September 2007 has been approved by the examiner.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's representative Nik Iyengar (Reg. No.60,910) on 4 December 2007.

Claims 18, 28 have been amended as follows:

- Claim 18, delete lines 1-3. Insert at the beginning of the claim --A computer program product comprising:
a computer readable medium storing executable code for in-place preservation of file system objects during a clone operation, the code comprising:--.
- Claim 28, line 2, delete "having a computer-readable memory containing a computer program product". Insert on the next line following "comprising"
--a processor; and
a computer-readable memory containing a computer program product executable on the processor, the computer program product further comprising --.

Allowable Subject Matter

Claims 1-4, 6-37 are allowed

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or make obvious in-place preservation of file system objects during a clone operation including identifying at least one in-place file system object at least partially within boundaries on a target storage medium, the boundaries to completely contain a resultant file system to be created by the clone operation, storing metadata concerning each in-place file system object at least partially within the boundaries, performing the cloning operation by creating the resultant file system only in locations within the boundaries in which no in-place file system object is located. These distinct limitations are present in all independent claims 1, 18, 28.

Claims 2-4, 6-17, 19-27, 29-37 being further limiting and definite are also allowable .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hasse et al (US 7,133,985) teach managing data associated with copying and replication procedures in a data storage environment.

Raymond et al (US 6,108,697) teach one-to-many disk imaging transfer over a network.

Cox et al (US 5,435,004) teach computerized system and method for data backup.

Chen et al (US 6,594,743) teach cloning data from source disk to target disk.

Green et al (US 2003/0220948) teach managing snapshot/backup collections in finite data storage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 571-272-4021. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/UL/
Uyen Le
Primary Examiner
10 December 2007